

# 32.2 Review

Grade: 12th  
Subject: Advanced Biology  
Date: 2/7/13

Feb 7-9:28 AM

- 1 The ~~appendicular~~<sup>axial</sup> skeleton includes the skull, the vertebral column, the ribs, and the sternum.

True

False

Feb 7-9:30 AM

2 The dense and strong outer layer of bone is the...

- A periosteum
- B compact bone
- C spongy bone
- D bone marrow

Feb 7-9:31 AM

3 There are two types of bone marrow:

- A red bone marrow
- B green bone marrow
- C white bone marrow
- D yellow bone marrow

Feb 7-9:32 AM

4 Bone-forming cells are called \_\_\_\_\_.

osteoblasts

Feb 7-9:32 AM

5 Cells that break down bones are called \_\_\_\_\_.

osteoclasts

Feb 7-9:33 AM

~~Ligaments~~  
6 ~~Tendons~~ are tough bands of connective tissue that connect one bone to another.

True

False

Feb 7-9:33 AM

7 Bursitis, is the inflammation of the fluid-filled sacs (bursae) that surrounds bones, resulting in pain, swelling, and reduced joint movement.

True

False

Feb 7-9:36 AM

8 Tennis elbow is a form of ....

- A osteoarthritis
- B Rheumatoid arthritis
- C Bursitis *Bursitis*
- D Sprains

Feb 7-9:37 AM

9 The only functions of bones are to provide for support, protection, and movement.

True  
False

Feb 7-9:38 AM

10 Bones are constantly being remodeled.

True  
False

Feb 7-9:38 AM

## Chapter 32 Review

Grade: 12th  
Subject: Advanced Biology  
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Feb 10-1:06 PM

1 What are living bone cells called?

- A osteoclasts
- ☒ B osteocytes
- C cartilage
- D bone marrow

Feb 10-1:29 PM

2 Wrists and ankles have a type of joint known as a gliding joint.

Feb 10-1:30 PM

3 What part of the muscle contracts?

- A tendon
- B myofibril
- ☒ C sarcomere
- D ligament

Feb 10-1:31 PM

4 The protective protein contained in the outer layers of epidermal cells is keratin.

Feb 10-1:32 PM

5 How do cells in the skin protect skin from the harmful effects of U.V. radiation?

- A they secrete oils
- B they store chitin
- C they absorb calcium
- ☒ D they produce melanin

Feb 10-1:33 PM

6 Where are the sebaceous glands located?

- A epidermis
- ☒ B dermis
- C sweat pores
- D subcutaneous tissue

Feb 10-1:34 PM

7 There is usually no pain associated with a \_\_\_\_\_ degree burn.

3rd

Feb 10-1:34 PM

8 Why is the exposure of skin to ultraviolet radiation a significant risk factor in the development of skin cancer?

- ☒ A it damages the DNA in skin cells
- ☐ B it causes excess vitamin D production
- ☐ C it mutates melanin molecules in the skin
- ☐ D it causes irregular freckles and moles to appear

Feb 10-1:36 PM

9 The division of the skeletal system that is related to movement is the appendicular skeleton.

True

False

Feb 10-1:36 PM

10 What type of tissue is bone?

- ☒ A connective tissue
- ☐ B epithelial tissue
- ☐ C integumentary tissue
- ☐ D ligamentary tissue

Feb 10-1:37 PM

11 Where in the bone is fat stored?

- A osteons
- B spongy bone
- C bone marrow
- D Haversian canals

Feb 10-1:38 PM

12 How are children's bones different from adult bones?

- A children's bones have fewer osteoblasts
- B children's bones have more red bone marrow
- C ossification is slower in children's bones
- D the osteon system in children is not fully developed

Feb 10-1:39 PM

13 What results from damage to the ligaments that holds joints together?

- A buristis
- B rheumotoid arthritis
- C tendonitis
- D a sprain

Feb 10-1:41 PM

14 Which is not characteristic of a smooth muscle?

- A it is an involuntary muscle
- B it has one nucleus per cell
- C it has striations and stripes
- D it lines the organs of the digestive tract

Feb 10-1:42 PM

15 What represents the organization of the ~~skeletal~~<sup>muscular</sup> system from larger to smaller units?

- ☒ A fibers, myofibrils, sarcomeres, filaments
- ☐ B filaments, myofibrils, sarcomeres, fibers
- ☐ C myofibrils, fibers, sarcomeres, filaments
- ☐ D sarcomeres, myofibrils, filaments, fibers

Feb 10-1:44 PM

16 When a muscle is stimulated by a nerve impulse, what electrolyte is released into the myofibrils?

- A calcium
- B oxygen
- C potassium
- D sodium

Feb 10-1:45 PM

17 The main cause of muscle fatigue, rapid breathing, and muscle pain during intense exercise is \_\_\_\_\_ .

*lactic acid*

Feb 10-1:47 PM

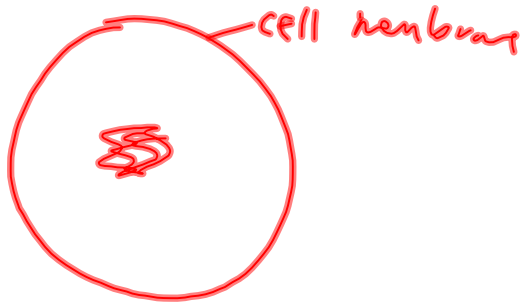
18 Which athlete is likely to have the highest proportion of slow-twitch muscle fibers?

- A long-distance swimmer
- B mountain biker
- C sprint runner
- D weight lifter

Feb 10-1:48 PM

19 Which type of muscle fiber responds to exercise by producing more mitochondria? **ATP**

- A slow-twitch muscle fibers
- B fast-twitch muscle fibers



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20 Which of the following are not found in the dermis?

- A muscles
- B sweat and oil glands
- ☒ C fat cells
- D nerve cells

Feb 10-1:51 PM

21 Which is not a function of bone?

- ☒ A production of vitamin D
- ☐ B internal support
- ☐ C protection of internal organs
- ☐ D storage of calcium

Feb 10-1:52 PM

22 Which pair of terms is mismatched?

- ☐ A cranium, sutures
- ☒ B wrist, pivot joint
- ☐ C shoulder, ball-and-socket joint
- ☐ D knee, hinge joint

Feb 10-1:53 PM

23 Which is not part of the axial skeleton?

- A skull
- B ribs
- ☒ C hip bone
- D vertebral column

Feb 10-1:54 PM

24 Which requires ATP?

- A muscle contraction
- B muscle relaxation
- ☒ C muscle contraction and relaxation
- D neither muscle contraction nor relaxation

Feb 10-1:55 PM

25 Which is characteristic of fast-twitch muscle fibers?

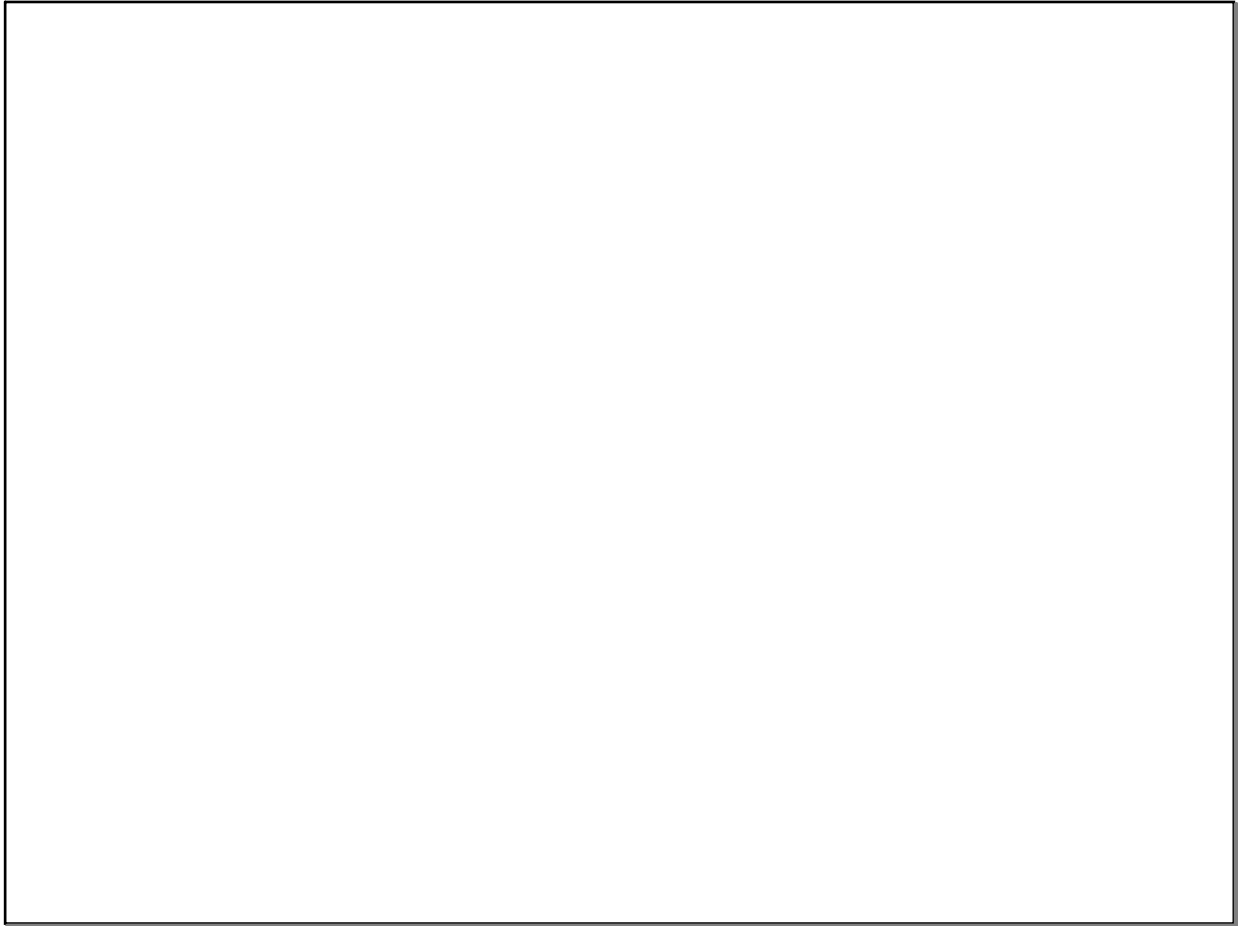
- A they contain more myoglobin than slow-twitch fibers
- B they are resistant to fatigue
- ☒ C they have fewer mitochondria than slow-twitch muscles
- D they require high amounts of oxygen in order to function

Feb 10-1:56 PM

26 Which type of bone is classified as irregular?

- A leg bones
- B skull
- ☒ C vertebrae
- D wrist bones

Feb 10-1:58 PM



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